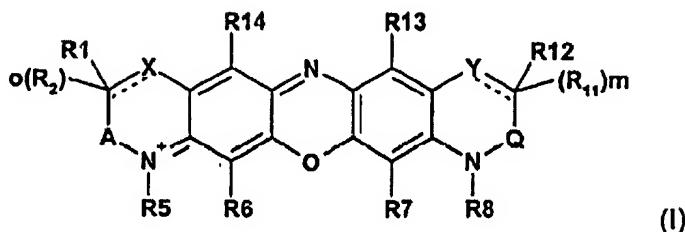


## Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the specification:

### Listing of Claims

#### 1. (original) Compounds of formula I



wherein

X and Y represent CH, CH<sub>2</sub> or a divalent or trivalent heteroatom under the proviso that X and Y are not simultaneously CH or CH<sub>2</sub>;

m and o represent independently of each other 0 or 1, with the proviso that

if m is 0 then the dotted line between Y and the neighboring C atom represents a bond and Y is CH or a trivalent heteroatom,

if m is 1 then the dotted line between Y and the neighboring C atom is absent and Y is CH<sub>2</sub> or a divalent heteroatom,

if o is 0 then the dotted line between X and the neighboring C atom represents a bond and X is CH or a trivalent heteroatom,

if o is 1 then the dotted line between X and the neighboring C atom is absent and X is CH<sub>2</sub> or a divalent heteroatom;

A represents (CR<sub>3</sub>R<sub>4</sub>)<sub>p</sub> and Q represents (CR<sub>9</sub>R<sub>10</sub>)<sub>n</sub>;

n and p represent independently of each other 0 or 1;

R<sub>6</sub>, R<sub>7</sub>, R<sub>13</sub>, and R<sub>14</sub> denote independently of each other hydrogen, halogen, (C<sub>1-4</sub>)alkyl, (C<sub>1-4</sub>)alkylSO<sub>2</sub>, SO<sub>3</sub>H, carboxy, (C<sub>1-4</sub>)alkoxy carbonyl, (C<sub>1-4</sub>)alkoxy, OH or NR<sub>15</sub>R<sub>16</sub>;

R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>9</sub>, R<sub>10</sub>, R<sub>11</sub> and R<sub>12</sub> denote independently of each other hydrogen, (C<sub>1-4</sub>)alkyl, carboxy, (C<sub>1-4</sub>)alkoxy carbonyl or (C<sub>1-4</sub>)alkoxy, or, when X is CH or CH<sub>2</sub> then R<sub>1</sub> and R<sub>2</sub> can also be OH or NR<sub>15</sub>R<sub>16</sub>, or when Y is CH or CH<sub>2</sub> then R<sub>11</sub>, R<sub>12</sub> can also be OH or NR<sub>15</sub>R<sub>16</sub>;

R<sub>5</sub>, R<sub>8</sub>, R<sub>15</sub> and R<sub>16</sub> are independently of each other hydrogen, (C<sub>1-4</sub>)alkyl, (C<sub>1-4</sub>)alkoxy, R<sub>17</sub>OC(O)-(C<sub>1-4</sub>)alkyl or (reactive group)-(C<sub>1-4</sub>)alkyl; and

R<sub>17</sub> represents hydrogen or (C<sub>1-4</sub>)alkyl;

in free base or acid addition salt form.

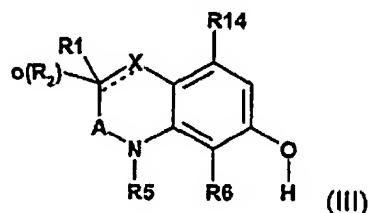
2. (original) A compound of formula I according to claim 1 in free base or acid addition salt form wherein X is O, S or CH<sub>2</sub> and Y is O, S or CH<sub>2</sub> with the proviso that X and Y are not both simultaneously CH<sub>2</sub>.

3. (original) A compound of formula I according to claim 1 wherein said compound is selected from

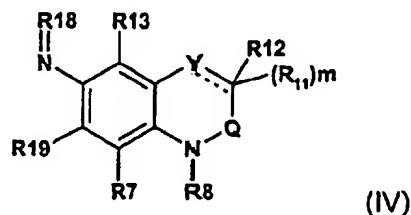
4,8-dimethyl-2,3,4,9,10,11-hexahydro-1,6-dioxa-4,13-diaza-8-azonia-pentacen chloride;  
8-ethyl-4-methyl-2,3,4,9,10,11-hexahydro-1,6-dioxa-4,13-diaza-8-azonia-pentacen chloride;  
4,8-dimethyl-3,8,9,10-tetrahydro-2H-1,6,11-trioxa-8,13-diaza-4-azonia-pentacen tetrafluoroborate;  
4,8-dimethyl-2,3,9,10-tetrahydro—4H-1,6-dioxa-11-thia-4,13-diaza-8-azonia-pentacen chloride;  
and  
8-(3-ethoxycarbonyl- propyl)-4-methyl-3,8,9,10-tetrahydro-2H-1,6,11-trioxa-8,13-diaza-4-azonia-pentacen chloride.

4. (currently amended) A composition comprising a compound according to of ~~any one of claims 1-3~~ claim 1 and a pharmaceutically acceptable excipient or diluent.

5. (original) A process for the production of a compound of formula I or a salt thereof, comprising the steps of reacting a phenol derivative of formula III



wherein the radicals and symbols A, X, R<sub>1</sub>, R<sub>2</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>14</sub> and o have the meanings as defined in claim 1 for a compound of formula I, with a nitroso or diazo compound of formula IV

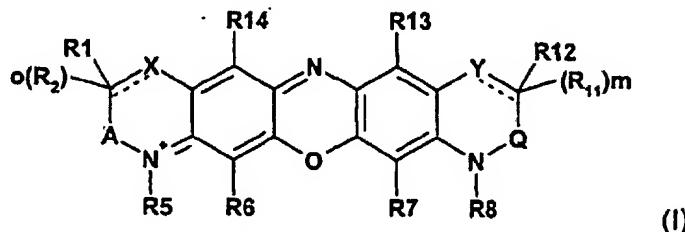


wherein the radicals and symbols Q, Y, R<sub>7</sub>, R<sub>8</sub>, R<sub>11</sub>, R<sub>12</sub>, R<sub>13</sub> and m have the meanings as defined in claim 1 for a compound of formula I, R<sub>18</sub> represents oxo or p-nitrophenyl-N= and R<sub>19</sub> represents hydroxy;

and recovering the resulting compound of formula I in free base form or in form of an acid addition salt.

6. (original) A method of labeling target structures in the brain comprising:

(i) applying a composition comprising a compound of formula I



wherein

X and Y represent CH, CH<sub>2</sub> or a divalent or trivalent heteroatom under the proviso that X and Y are not simultaneously CH or CH<sub>2</sub>;

m and o represent independently of each other 0 or 1, with the proviso that

if m is 0 then the dotted line between Y and the neighboring C atom represents a bond and Y is CH or a trivalent heteroatom,

if m is 1 then the dotted line between Y and the neighboring C atom is absent and Y is CH<sub>2</sub> or a divalent heteroatom,

if o is 0 then the dotted line between X and the neighboring C atom represents a bond and X is CH or a trivalent heteroatom,

if o is 1 then the dotted line between X and the neighboring C atom is absent and X is CH<sub>2</sub> or a divalent heteroatom;

A represents (CR<sub>3</sub>R<sub>4</sub>)<sub>p</sub> and Q represents (CR<sub>9</sub>R<sub>10</sub>)<sub>n</sub>;

n and p represent independently of each other 0 or 1;

R<sub>6</sub>, R<sub>7</sub>, R<sub>13</sub>, and R<sub>14</sub> denote independently of each other hydrogen, halogen, (C<sub>1-4</sub>)alkyl,

(C<sub>1-4</sub>)alkylSO<sub>2</sub>, SO<sub>3</sub>H, carboxy, (C<sub>1-4</sub>)alkoxy carbonyl, (C<sub>1-4</sub>)alkoxy, OH or NR<sub>15</sub>R<sub>16</sub>;

R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>9</sub>, R<sub>10</sub>, R<sub>11</sub> and R<sub>12</sub> denote independently of each other hydrogen, (C<sub>1-4</sub>)alkyl, carboxy, (C<sub>1-4</sub>)alkoxy carbonyl or (C<sub>1-4</sub>)alkoxy, or, when X is CH or CH<sub>2</sub> then R<sub>1</sub> and R<sub>2</sub> can also be OH or NR<sub>15</sub>R<sub>16</sub>, or when Y is CH or CH<sub>2</sub> then R<sub>11</sub>, R<sub>12</sub> can also be OH or NR<sub>15</sub>R<sub>16</sub>;

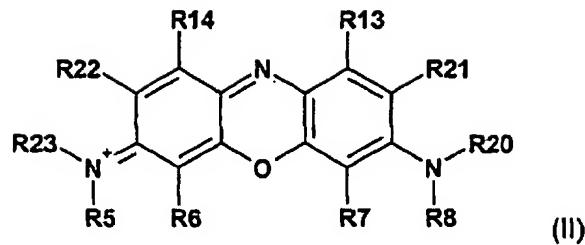
R<sub>5</sub>, R<sub>8</sub>, R<sub>15</sub> and R<sub>16</sub> are independently of each other hydrogen, (C<sub>1-4</sub>)alkyl, (C<sub>1-4</sub>)alkoxy,

R<sub>17</sub>OC(O)-(C<sub>1-4</sub>)alkyl or (reactive group)-(C<sub>1-4</sub>)alkyl; and

R<sub>17</sub> represents hydrogen or (C<sub>1-4</sub>)alkyl;

in free base or acid addition salt form,

or of formula II



wherein

R<sub>6</sub>, R<sub>7</sub>, R<sub>13</sub>, and R<sub>14</sub> denote independently of each other hydrogen, halogen, (C<sub>1-4</sub>)alkyl, (C<sub>1-4</sub>)alkylSO<sub>2</sub>, SO<sub>3</sub>H, carboxy, (C<sub>1-4</sub>)alkoxy carbonyl, (C<sub>1-4</sub>)alkoxy, OH or NR<sub>15</sub>R<sub>16</sub>, and R<sub>21</sub> and R<sub>22</sub> are hydrogen, (C<sub>1-4</sub>)alkyl, (C<sub>1-4</sub>)alkoxy, phenyl, phenylalkyl, carboxy or halogen; R<sub>14</sub> and R<sub>22</sub> together with the carbon atoms to which they are attached can also form a saturated or unsaturated ring;

R<sub>21</sub> and R<sub>13</sub> together with the carbon atoms to which they are attached can also form a saturated or unsaturated ring;

R<sub>5</sub>, R<sub>8</sub>, R<sub>20</sub> and R<sub>23</sub> are hydrogen, (C<sub>1-4</sub>)alkyl, (C<sub>1-4</sub>)alkoxy, polyoxyhydrocarbyl, phenyl, phenylalkyl;

R<sub>8</sub> and R<sub>20</sub> together with the nitrogen atom to which they are attached can form a saturated or unsaturated ring,

R<sub>23</sub> and R<sub>5</sub> together with the nitrogen atom to which they are attached can form a saturated or unsaturated ring,

R<sub>22</sub> and R<sub>23</sub> together with the atoms to which they are attached can form a saturated or unsaturated ring,

R<sub>5</sub> together with R<sub>6</sub> together with the atoms to which they are attached can form a saturated or unsaturated ring,

R<sub>7</sub> together with R<sub>8</sub> together with the atoms to which they are attached can form a saturated or unsaturated ring,

R<sub>20</sub> together with R<sub>21</sub> together with the atoms to which they are attached can form a saturated or unsaturated ring,

(ii) allowing sufficient time for said compound to be chemically associated with the target structure in the brain, and

(iii) detecting said compound using near-infrared radiation.

7. (original) The method according to claim 6 wherein said target structures are amyloid plaques.

8. (original) The method according to claim 7 for identifying diseases related to amyloid plaque generation and/or aggregation.

9. (original) The method according to claim 7 or claim 8 for identifying Alzheimer's disease.
10. (currently amended) Use of a compound of formula I according to ~~any one of claims 1-3~~ claim 1 in free base or acid addition salt form as a near-infrared imaging agent.
11. (original) Use of a compound of formula II as defined in claim 6 as a near-infrared imaging agent.
12. (original) Use according to claims 10 or 11 as a near-infrared imaging agent to image amyloid plaques.
13. (currently amended) A conjugate comprising a compound of formula I according to ~~any one of claims 1-3~~ claim 1 covalently linked to a biomolecule through a reactive group.
14. (original) A conjugate according to claim 13 wherein the biomolecule is selected from the group consisting of nucleoside, nucleotide, oligonucleotide, nucleic acid, protein, peptide, amino acid, polysaccharide, oligosaccharide, monosaccharide, drug or a small molecule having a molecular weight of less than 500.
15. (original) A conjugate according to claim 13 or 14 capable of being detected using near-infrared radiation.